

Davis, Todd H.

From: Brown, Randolph
Sent: Thursday, February 25, 2021 11:52 AM
To: Davis, Todd H.
Subject: Sunshine Laundry Comments

Todd, enclosed are my comments for the documents you provided for the Sunshine Laundry Site in Fort Dodge, Iowa. If you need a formal memo let me know. My review was limited to the three documents you provided, namely the 1992 RCRA Generator memo, the groundwater sampling data summary table, and the 2014 Iowa DNR (IDNR) memorandum.

- 1) Tetrachloroethylene (PCE), trichloroethylene (TCE), 1,2-dichloroethylene (1,2-DCE) and vinyl chloride have been detected above maximum contaminant levels (MCLs) in groundwater in one or more monitoring wells at the Sunshine Laundry Site (Site). From Hazard Ranking System (HRS) considerations, there is an observed release to groundwater of hazardous substances, pollutants or contaminants. The extent of groundwater contamination does not appear to be fully characterized from the available data.
- 2) PCE, TCE and vinyl chloride are present above shallow groundwater Vapor Intrusion (VI) Screening Levels (VISLs) indicating a complete VI pathway may be present in buildings located over areas of contaminated groundwater above VISLs.
- 3) The 2014 IDNR memorandum indicated PCE in sub-slab sample SVP-1 was 170 $\mu\text{g}/\text{m}^3$, above EPA Region 7's residential VI Removal Management Level (VIRML) of 42 $\mu\text{g}/\text{m}^3$ and near the worker VIRML of 180 $\mu\text{g}/\text{m}^3$. The 2014 IDNR memorandum indicated PCE in sub-slab sample SVP-2 at 630,000 $\mu\text{g}/\text{m}^3$, well above both residential and worker VIRMLs. The sub-slab samples appear to be a single event; EPA Region 7 guidance recommends four seasonal sampling events to evaluate seasonal variations. Any future site assessment should collect the four seasonal sampling rounds for a more thorough VI evaluation.
- 4) Further site assessment is appropriate based on the existing data especially to further evaluate the VI (subsurface intrusion) and groundwater pathways for both removal site evaluation and HRS considerations. Because of the previous exceedances of VIRMLs for PCE, the potential for VI in other buildings at the Site, and additional evaluation of potential soil source areas, an integrated removal/remedial assessment (PA/SI with Removal Site Evaluation) is recommended.
- 5) Soil sampling data appears to be limited. Additional soil sampling is recommended through an Integrated Assessment/PA/SI that may help identify a source area at the former Sunshine Laundry that could potentially be used to target a soil removal or evaluation of other alternatives such as thermal treatment.
- 6) Additional direct-push groundwater sampling conducted through an Integrated Assessment may help determine areas of elevated PCE and PCE degradation products that could be targeted for in-situ chemical oxidation or other alternatives. This would also help determine the extent of groundwater contamination.
- 7) Although not mentioned in any of the documents, if property redevelopment is a possibility, Brownfields may be an option if the municipality applies for assistance. If an application is made and approved by EPA, targeted Brownfields assessment (TBA) options would be available and if necessary the possibility of cleanup loans or grants. However given the historic VI data a more rapid site evaluation is recommended at least for the VI and soil pathways in the interim if the TBA option is pursued.

Again, my review was limited to the three documents forwarded for review. If you require any further assistance or need a formal memorandum for the Sunshine Laundry Site, please let me know.

Randy



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